### PORSCHE'

### Technical Information

Service

150/21 ENU 1981

### "Engine Control System Fault" Warning/Fault Memory Entry for Engine-Compartment Blower (P1BF600/P1BF700) in the DME Control Unit (150/21)

Vehicle Type: 911 Carrera (992)/911 Carrera S (992)/911 Carrera 4 (992)/911 Carrera 4S (992) 911 Turbo (992)/911 Turbo S (992)

- Model Year: As of 2020 up to 2021
- Concerns: Engine electronics (DME) control unit
- Information: The yellow warning **'Engine control system fault Driving permitted'** is displayed in the instrument cluster.
  - The fault memory entry 'P1BF600 Engine-compartment blower 1 (left) signal implausible' and/or the fault memory entry 'P1BF700 – Engine-compartment blower 2 (right) – signal implausible' is stored in the fault memory of the DME control unit. This can be caused by a high-frequency fault on the pulse width modulation line of the purge fan.
- Action required: In the event of a customer complaint, re-program the DME control unit using PIWIS Tester software version **40.350.050** or a higher version.

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### Information

The remedial action described here only applies if one of the two fault memory entries mentioned -'P1BF600 – Engine-compartment blower 1 (left) – signal implausible' or 'P1BF700 – Engine-compartment blower 2 (right) – signal implausible' - occurs by itself and without any other fault memory entries for the engine compartment purge fan. If the fault occurs together with other fault memory entries for the engine compartment purge fan, the fault must be found and corrected separately.

#### i Information

The total time required for control unit programming is **approx. 12 minutes**.

### **Required tools**

### Information

Lithium starter batteries must only be charged using a suitable battery charger that has a current and voltage-controlled charge map.

For further information about the battery chargers to be used, see  $\Rightarrow$  Workshop Manual '270689 Charging battery/vehicle electrical system'.

- Tools:
- Battery charger with a current rating of at least 90 A and, if required, also with a current and voltage-controlled charge map for lithium starter batteries, e.g. VAS 5908 battery charger, 90A
  - 9900 PIWIS Tester 3 with PIWIS Tester software version 40.350.050 (or higher) installed

### **Preparatory work**

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Electrically moved side windows and rear spoiler

- · Danger of limbs being trapped or severed
- Risk of damage to components
- $\Rightarrow$  Do not reach into the danger area.
- $\Rightarrow$  Keep third parties away from the danger area.
- $\Rightarrow$  Do not move components or tools into the danger area.
- $\Rightarrow$  Retract roll-up sun blinds on the rear side windows before starting programming or coding.

#### NOTICE

Fault entry in the fault memory and control unit programming aborted due to undervoltage.

- Increased current draw during diagnosis or control unit programming can cause a drop in voltage, which can result in one or more fault entries and the abnormal termination of the programming process.
- ⇒ Before getting started, connect a suitable battery charger with a current rating of at least 90 A to the jump-start terminals.

### NOTICE

Control unit programming will be aborted if the WiFi connection is unstable.

- An unstable WiFi connection can interrupt communication between the PIWIS Tester and the vehicle communication module (VCI). As a result, programming may be aborted.
- ⇒ During control unit programming, always connect the PIWIS Tester to the vehicle communication module (VCI) via the USB cable.

### NOTICE

Control unit programming will be aborted if the driver's key is not recognized

- If the driver's key is not recognized in the vehicle, programming cannot be started or will be interrupted.
- ⇒ Place the driver's key with the back facing down in front of the lock opening for the center console cover to guarantee a permanent radio link between the vehicle and driver's key.

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Work Procedure: 1 Carry out general preliminary work for control unit programming as described in  $\Rightarrow$  Workshop Manual '9X00IN Basic instructions and procedure for control unit programming - section on "Preliminary work".

### **Re-programming DME control unit**

#### NOTICE

Use of a PIWIS Tester software version that is older than the prescribed version

- Measure is ineffective
- ⇒ Always use the prescribed version or a higher version of the PIWIS Tester software for control unit programming and coding.
- Work Procedure: 1 The basic procedure for programming a control unit is described in the Workshop Manual  $\Rightarrow$ Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Programming".

#### Specific information on control unit programming in the context of this Technical Information:

Required PIWIS Tester software version:	40.350.050 (or higher)
Type of control unit programming:	Control unit programming using the <b>'Automatic</b> <b>programming'</b> function of the DME control unit:
	'Engine electronics (DME)' control unit – 'Coding/programming' menu – 'Automatic programming' function.
Programming sequence:	Read and follow the <b>information and instructions</b> <b>on the PIWIS Tester</b> during the guided programming sequence. During the programming sequence, the <b>DME control</b> <b>unit</b> is <b>re-programmed</b> and then <b>re-codedautomat-</b> <b>ically</b> .
	Do not interrupt programming and coding.
	Once the control units have been programmed and coded, you will be prompted to switch the ignition off and then back on again after a certain waiting time.
	Backup documentation of the new software versions is then performed.
Programming time (approx.):	12 minutes

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# **Technical Information**

Data record (software part number and software version) programmed for the DME control unit during programming:	See ⇒ Technical Information '9X00IN Overview of the programmed DME software versions'. The software part number and software version of the programmed data record are based on the specified PIWIS Tester software version. Please note that this may have changed in a higher version.
Procedure in the event of abnormal termi- nation of control unit programming:	<ul> <li>Switch ignition off and then on again.</li> <li>Read out and erase the fault memory. ⇒ Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Subsequent work"'</li> <li>Repeat control unit programming by restarting programming.</li> </ul>
Procedure in the event of error messages appearing during the programming sequence:	⇒ Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Fault finding"'.

### Overview of the programmed DME software versions



### Information

The software part number and software version of the programmed data record are based on the specified PIWIS Tester software version. Please note that this may have changed in a higher version.

### Overview: 911 Carrera/911 Carrera 4

Exhaust emission standard	Equipment	Software Part No.	Software version
EU6W (M-no. 7GH) (M-no. 7MJ) (M-no. 7MM)	PDK	992906021BC	0001
<b>C6b</b> (M-no. 7CM)	PDK	992906021BD	0001
LEV3/Tier3 (M-no. 7CE)	PDK	992906021BB	0001
<b>EU6 AP</b> (M-no. 4BI)	PDK	992906021BE	0001

# **Technical Information**

#### 911 Carrera S/911 Carrera 4S

Exhaust emission standard	Equipment	Software Part No.	Software version
EU6W (M-no. 7GH) (M-no. 7MJ) (M-no. 7MM)	PDK	992906020BS	0001
<b>C6b</b> (M-no. 7CM)	PDK	992906020BT	0001
LEV3/Tier3 (M-no. 7CE)	PDK	992906020BQ	0001
LEV3/Tier3 (M-no. 7CE)	Manual transmission	992906020BR	0001
<b>EU6 AP</b> (M-no. 4BI)	PDK	992906020CA	0001
EU6 AP (M-no. 4BI)	Manual transmission	992906020CB	0001

#### 911 Turbo

Exhaust emission standard	Equipment	Software Part No.	Software version
<b>EU6W</b> (M-no. 7GH) (M-no. 7MJ) (M-no. 7MM)	PDK	992906027T	0001
LEV3/Tier3 (M-no. 7CE)	PDK	992906027S	0001
<b>EU6 AP</b> (M-no. 4Bl)	PDK	992906027R	0001

#### 911 Turbo S

Exhaust emission standard	Equipment	Software Part No.	Software version
<b>EU6W</b> (M-no. 7GH) (M-no. 7MJ) (M-no. 7MM)	PDK	992906026T	0001
<b>C6b</b> (M-no. 4BD)	PDK	992906026AA	0001

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LEV3/Tier3 (M-no. 7CE)	PDK	992906026S	0001
EU6 AP (M-no. 4Bl)	PDK	992906026R	0001

### **Concluding work**

Work Procedure: 1 Carry out general subsequent work for control unit programming as described in  $\Rightarrow$  Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Subsequent work"'.

#### Invoicing

For documentation and invoicing in the event of a warranty claim, specify the required labor operations and the specified PQIS coding in the warranty claim, depending on the required scope of work.

APOS	Labor operation	I No.
24702540	Programming DME control units	

PQIS coding

Location (FES5)	19810	Engine-compartment blower
Damage type (SA4)	6047	Diagnostic error

References: ⇒ Workshop Manual '270689 Charging battery/vehicle electrical system'

> $\Rightarrow$  Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'

Important Notice: Technical Bulletins issued by Porsche Cars North America, Inc. are intended only for use by professional automotive technicians who have attended Porsche service training courses. They are written to inform those technicians of conditions that may occur on some Porsche vehicles, or to provide information that could assist in the proper servicing of a vehicle. Porsche special tools may be necessary in order to perform certain operations identified in these bulletins. Use of tools and procedures other than those Porsche recommends in these bulletins may be detrimental to the safe operation of your vehicle, and may endanger the people working on it. Properly trained Porsche technicians have the equipment, tools, safety instructions, and know-how to do the job properly and safely. Part numbers listed in these bulletins are for reference only. The work procedures updated electronically in the Porsche PIWIS diagnostic and testing device take precedence and, in the event of a discrepancy, the work procedures in the PIWIS Tester are the ones that must be followed.